Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-328. (Canceled).

329. (Currently amended) A water-based drilling fluid comprising:

an aqueous base;

about 7.5 lb./bbl. water soluble polymer comprising 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch; and,

about 2 lb./bbl. surfactant in association with said water soluble polymer;

~~said water-based drilling fluid being non-aerated,~~

wherein said water soluble polymer, said surfactant, and said association provide said water- based drilling fluid with effective rheology and fluid loss control properties comprising low shear viscosity.

330. (Previously presented) The water-based drilling fluid of claim 329 wherein said surfactant is selected from the group consisting of alkyl sulfates, alkyl ether sulfates, alkyl sulfonates, ethoxylated esters, ethoxylated glycoside esters, alcohol ethers, and phosphated esters comprising about 8 to about 18 carbon atoms, alkali metal salts thereof, and combinations thereof.

331. (Previously presented) The water-based drilling fluid of claim 329 wherein said surfactant is selected from the group consisting of alkyl sulfates and alkyl ether sulfates.

332. (Previously presented) The water-based drilling fluid of claim 329 wherein said surfactant comprises an alkyl ether sulfate.

333. (Previously presented) The water-based drilling fluid of claim 329 wherein said surfactant is sodium tridecyl ether sulfate.

334. (Previously presented) The water-based drilling fluid of claim 329 wherein said low shear viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

335. (Previously presented) The water-based drilling fluid of claim 329 wherein said low shear viscosity is about 100,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

336. (Previously presented) The water-based drilling fluid of claim 331 wherein said low shear viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

337. (Previously presented) The water-based drilling fluid of claim 332 wherein said low shear viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

338. (Previously presented) The water-based drilling fluid of claim 333 wherein said low shear viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

339. (Previously presented) The water-based drilling fluid of claim 329 further comprising a concentration of non-toxic water emulsifiable material as an internal phase.

340. (Previously presented) The water-based drilling fluid of claim 339 wherein said concentration is from about 2 to about 20 vol.%.

341. (Previously presented) The water-based drilling fluid of claim 329 wherein said fluid consists essentially of additives other a solid bridging agent.

342. (Previously presented) The water-based drilling fluid of claim 331 wherein said fluid consists essentially of additives other than a solid bridging agent.

343. (Previously presented) The water-based drilling fluid of claim 334 wherein said fluid consists essentially of additives other than a solid bridging agent.

344. (Previously presented) The water-based drilling fluid of claim 336 wherein said fluid consists essentially of additives other than a solid bridging agent.

345. (Previously presented) The water-based drilling fluid of claim 337 wherein said fluid consists essentially of additives other than a solid bridging agent.

346. (Previously presented) The water-based drilling fluid of claim 329 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

347. (Previously presented) The water-based drilling fluid of claim 341 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

348. (Previously presented) The water-based drilling fluid of claim 342 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

349. (Previously presented) The water-based drilling fluid of claim 329 wherein said water soluble polymer is selected from the group consisting of water soluble starches and modified versions thereof, water-soluble polysaccharides and modified versions thereof, water-soluble celluloses and modified versions thereof, water soluble polyacrylamides and copolymers thereof, and combinations thereof.

350. (Previously presented) The water-based drilling fluid of claim 341 wherein said water soluble polymer is selected from the group consisting of water soluble starches and modified versions thereof, water-soluble polysaccharides and modified versions thereof, water-

soluble celluloses and modified versions thereof, water soluble polyacrylamides and copolymers thereof, and combinations thereof.

351. (Previously presented) The water-based drilling fluid of claim 344 wherein said water soluble polymer is selected from the group consisting of water soluble starches and modified versions thereof, water-soluble polysaccharides and modified versions thereof, water-soluble celluloses and modified versions thereof, water soluble polyacrylamides and copolymers thereof, and combinations thereof.

352. (Previously presented) The water based drilling fluid of claim 329 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

353. (Previously presented) The water based drilling fluid of claim 352 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

354. (Previously presented) The water based drilling fluid of claim 341 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

355. (Previously presented) The water based drilling fluid of claim 354 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

356. (Previously presented) The water based drilling fluid of claim 346 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

357. (Previously presented) The water based drilling fluid of claim 356 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

358. (Canceled)

359. (Previously presented) The water-based drilling fluid of claim 351 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of

modified polysaccharides having a weight average molecular weight of about from about 700,000 to about 1,200,000.

360. (Currently amended) ~~The water-based drilling fluid of claim 351 wherein said water-soluble polymer comprises~~A water-based drilling fluid comprising:

an aqueous base;

about 7.5 lb./bbl. water soluble polymer comprising xanthan polysaccharides; and,

about 2 lb./bbl. surfactant in association with said water soluble polymer, said surfactant being selected from the group consisting of alkyl sulfates and alkyl ether sulfates;

said water based drilling fluid consisting essentially of additives other than a solid bridging agent,

wherein said water soluble polymer, said surfactant, and said association provide said water- based drilling fluid with effective rheology and fluid loss control properties comprising low shear viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F;

361. (Previously presented) A water-based drilling fluid comprising:

an aqueous base;

about 7.5 lb./bbl. water soluble polymer selected from the group consisting of synthetically modified starches having a weight average molecular weight of from about 200,000 to about 2,500,000; and,

about 2 lb./bbl. surfactant in association with said water soluble polymer;

wherein said water soluble polymer, said surfactant, and said association provide said water- based drilling fluid with effective rheology and fluid loss control properties comprising low shear viscosity.

362. (Previously presented) The water-based drilling fluid of claim 351 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of synthetically modified starches having a weight average molecular weight of from about 600,000 to about 1,000,000.

363. (Previously presented) The water-based drilling fluid of claim 361 wherein said synthetically modified starches comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

364. (Previously presented) The water-based drilling fluid of claim 358 wherein said synthetically modified polysaccharides comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

365.-369. (Canceled).

370. (Currently amended) A water-based drilling fluid comprising:

about 7.5 lb./bbl. water soluble polymer comprising from about 40 to about 60 wt.% xanthan polysaccharide and from about 40 to about 60 wt.% synthetically modified starch comprising one or more functional groups selected from the group consisting of carboxymethyl, propylene glycol, and epichlorohydrin functional groups;

about 2 lb./bbl. sodium tridecyl ether sulfate in association with said water soluble polymer; and

a concentration of a non-toxic water emulsifiable material as an internal phase;

wherein said water soluble polymer, said surfactant, and said association provide said water-based drilling fluid with effective rheology and fluid loss control properties comprising low shear viscosity.

371. (Canceled)

372. (Previously presented) The water-based drilling fluid of claim 370 wherein said water soluble polymer is selected from the group consisting of water soluble starches and modified versions thereof, water-soluble polysaccharides and modified versions thereof, water-soluble celluloses and modified versions thereof, water soluble polyacrylamides and copolymers thereof, and combinations thereof.

373.-374. (Canceled)

375. (Previously presented) The water-based drilling fluid of claim 370 wherein said water soluble polymer is a combination comprising about 50 wt.% xanthan polysaccharide and about 50 wt.% synthetically modified starch comprising one or more functional groups selected from the group consisting of carboxymethyl, propylene glycol, and epichlorohydrin functional groups.

376. (Previously presented) A water-based drilling fluid comprising:

an aqueous base;

about 7.5 lb./bbl. of water soluble polymer comprising a combination of about 50 wt.% xanthan polysaccharide and about 50 wt.% synthetically modified starch comprising one or more functional groups selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin functional group;

about 2 lb./bbl. sodium tridecyl ether sulfate;

wherein said water soluble polymer, said surfactant, and said association provide said water-based drilling fluid with effective rheology and fluid loss control properties comprising low shear rate viscosity; and

wherein said water-based fluid consists essentially of additives other than solid bridging agents.

377. (Previously presented) The water based drilling fluid of claim 376 further comprising a concentration of a non-toxic water emulsifiable material as an internal phase.

378. (Previously presented) The water-based drilling fluid of claim 377 wherein said non-toxic water emulsifiable material is a water insoluble material selected from the group consisting of olefins, paraffins, water insoluble glycols, water insoluble esters, water insoluble Fischer-Tropsch reaction products, and combinations thereof.

379. (Previously presented) The water-based drilling fluid of claim 376 further comprising an alkali metal salt of a compound selected from the group consisting of a thiosulfate and a thiosulfonate.

380. (Previously presented) The water-based drilling fluid of claim 377 further comprising an alkali metal salt of a compound selected from the group consisting of a thiosulfate and a thiosulfonate.

381. (Previously presented) The water-based drilling fluid of claim 376 wherein said water soluble polymer comprises 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch.

382. (Previously presented) The water-based drilling fluid of claim 377 wherein said water soluble polymer comprises 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch.

383. (Previously presented) The water-based drilling fluid of claim 379 wherein said water soluble polymer comprises 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch.

384. (Previously presented) The water-based drilling fluid of claim 380 wherein said water soluble polymer comprises 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch.

385. (Previously presented) The water-based drilling fluid of claim 376 wherein said low shear rate viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

386. (Previously presented) The water-based drilling fluid of claim 377 wherein said low shear rate viscosity is about 100,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

387. (Previously presented) The water-based drilling fluid of claim 378 wherein said low shear rate viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

388. (Previously presented) The water-based drilling fluid of claim 379 wherein said low shear rate viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

389. (Previously presented) The water-based drilling fluid of claim 380 wherein said low shear rate viscosity is about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

390. (Previously presented) The water-based drilling fluid of claim 377 wherein said concentration is from about 2 to about 20 vol.%.

391. (Previously presented) The water-based drilling fluid of claim 390 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

Claims 392-412. (Canceled).

413. (currently amended) A water-based drilling fluid comprising:

an aqueous base comprising a concentration of about 20 vol.% or less non-toxic water emulsifiable material as an internal phase;

a quantity of water soluble polymer comprising polymers selected from the group consisting of synthetically modified starches having a weight average molecular weight of from about 200,000 to about 2,500,000, said water soluble polymer comprising xanthan polysaccharides; and,

an amount of surfactant in association with said water soluble polymer, said surfactant being selected from the group consisting of alkyl sulfates, alkyl ether sulfates, alkyl sulfonates, ethoxylated esters, ethoxylated glycoside esters, alcohol ethers, and phosphated esters comprising about 8 to about 18 carbon atoms, alkali metal salts thereof, and combinations thereof;

wherein said quantity, said amount, and said association provide said water based drilling fluid with effective rheology and fluid loss control properties comprising a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

414. (Canceled).

415. (previously presented) The water-based drilling fluid of claim 413 wherein said effective rheology and fluid loss control properties comprise a low shear rate viscosity of about 100,000 cP or more upon exposure to 0.3 rpm , measured with a Brookfield viscometer at 75 °F.

416. (Canceled)

417. (previously presented) The water-based drilling fluid of claim 413 wherein said surfactant is selected from the group consisting of alkyl sulfates and alkyl ether sulfates.

418. (previously presented) The water-based drilling fluid of claim 413 wherein said surfactant comprises an alkyl ether sulfate.

419. (Canceled)

420. (Previously presented) The water-based drilling fluid of claim 415 wherein said surfactant is selected from the group consisting of alkyl sulfates and alkyl ether sulfates.

421. (Previously presented) The water-based drilling fluid of claim 415 wherein said surfactant comprises an alkyl ether sulfate.

422. (Previously presented) The water-based drilling fluid of claim 415 wherein said fluid consists essentially of additives other than a solid bridging agent.

423. (Previously presented) The water-based drilling fluid of claim 420 wherein said fluid consists essentially of additives other than a solid bridging agent.

424. (Previously presented) The water-based drilling fluid of claim 421 wherein said fluid consists essentially of additives other than a solid bridging agent.

425. (Previously presented) The water-based drilling fluid of claim 413 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

426. (Previously presented) The water-based drilling fluid of claim 420 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

427. (Previously presented) The water-based drilling fluid of claim 424 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

428. (Previously presented) The water-based drilling fluid of claim 424 wherein said effective fluid loss control properties comprise a fluid loss of about 1 ml./30 min. or less using the standard dynamic filtration fluid loss test.

429. (Previously presented) The water based drilling fluid of claim 413 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

430. (Previously presented) The water based drilling fluid of claim 429 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

431. (Previously presented) The water-based drilling fluid of claim 424 wherein said concentration is from about 2 to about 20 vol.%.

432. (Previously presented) The water-based drilling fluid of claim 413 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of modified polysaccharides having a weight average molecular weight of about 500,000 to about 2,500,000.

433. (Previously presented) The water-based drilling fluid of claim 413 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of modified polysaccharides having a weight average molecular weight of about from about 700,000 to about 1,200,000.

434.-436. (Canceled)

437. (Previously presented) The water-based drilling fluid of claim 413 wherein said water soluble polymer comprises polymers selected from the group consisting of synthetically

modified starches having a weight average molecular weight of from about 600,000 to about 1,000,000.

438. (Previously presented) The water-based drilling fluid of claim 432 wherein said synthetically modified polysaccharides comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

439. (Previously presented) The water-based drilling fluid of claim 413 wherein said synthetically modified starches comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

440. (Currently amended) The ~~A~~ water-based drilling fluid of claim 413 ~~comprising:~~

~~an aqueous base comprising a concentration of about 20 vol.% or less non-toxic water emulsifiable material as an internal phase;~~

~~a quantity of water soluble polymer comprising polymers selected from the group consisting of synthetically modified starches having a weight average molecular weight of from about 200,000 to about 2,500,000; and,~~

~~an amount of surfactant in association with said water soluble polymer;~~

~~wherein said quantity, said amount, and said association provide said water based drilling fluid~~ having a density of about 7.9 lb/gal. or more ~~with effective rheology and fluid loss control properties comprising a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F~~.

441. (Currently amended) A water-based drilling fluid comprising:

an aqueous base;

a quantity of water soluble polymer comprising one or more polymers selected from the group consisting of synthetically modified starches having a weight average

molecular weight of from about 200,000 to about 2,500,000, said water soluble polymer comprising xanthan polysaccharide;

an amount of surfactant in association with said water soluble polymer, said surfactant being selected from the group consisting of alkyl sulfates, alkyl ether sulfates, alkyl sulfonates, ethoxylated esters, ethoxylated glycoside esters, alcohol ethers, and phosphated esters comprising about 8 to about 18 carbon atoms, alkali metal salts thereof, and combinations thereof;

wherein said quantity, said amount, and said association provide said water- based drilling fluid with effective rheology and fluid loss control properties; and

a concentration of about 20 vol.% or less non-toxic water emulsifiable material as an internal phase, said surfactant being effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 30 microns or less.

442. (Canceled)

443. (Previously presented) The water-based drilling fluid of claim 441 wherein said surfactant is selected from the group consisting of alkyl sulfates and alkyl ether sulfates.

444. (Previously presented) The water-based drilling fluid of claim 441 wherein said surfactant comprises an alkyl ether sulfate.

445. (Previously presented) The water-based drilling fluid of claim 441 wherein said surfactant is sodium tridecyl ether sulfate.

446. (Previously presented) The water-based drilling fluid of claim 441 wherein said surfactant is effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 20 microns or less.

447. (Previously presented) The water-based drilling fluid of claim 441 wherein said surfactant is effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 15 microns or less.

448. (Previously presented) The water-based drilling fluid of claim 441 wherein said surfactant is effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 5 microns or less.

449. (Previously presented) The water-based drilling fluid of claim 441 wherein said effective rheology and fluid loss control properties comprise a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

450. (Previously presented) The water-based drilling fluid of claim 441 wherein said concentration is from about 2 to about 20 vol.%.

451. (Previously presented) The water-based drilling fluid of claim 441 wherein said concentration is about 5 vol.% .

452. (Previously presented) The water-based drilling fluid of claim 446 wherein said concentration is about 5 vol.%.

453. (Previously presented) The water-based drilling fluid of claim 441 wherein said non-toxic water emulsifiable material is a water insoluble material selected from the group consisting of olefins, paraffins, water insoluble glycols, water insoluble esters, water insoluble Fischer-Tropsch reaction products, and combinations thereof.

454. (Previously presented) The water-based drilling fluid of claim 441 wherein said water emulsifiable material is a water insoluble material selected from the group consisting of olefins, paraffins, water insoluble glycols, and combinations thereof.

455. (Previously presented) The water-based drilling fluid of claim 446 wherein said water emulsifiable material is a water insoluble material selected from the group consisting of olefins, paraffins, water insoluble glycols, and combinations thereof.

456. (Previously presented) The water-based drilling fluid of claim 441 wherein said fluid consists essentially of additives other a solid bridging agent.

457. (Previously presented) The water-based drilling fluid of claim 446 wherein said fluid consists essentially of additives other than a solid bridging agent.

458. (Previously presented) The water-based drilling fluid of claim 452 wherein said fluid consists essentially of additives other than a solid bridging agent.

459. (Previously presented) The water-based drilling fluid of claim 441 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

460. (Previously presented) The water-based drilling fluid of claim 448 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

461. (Previously presented) The water-based drilling fluid of claim 441 wherein said effective fluid loss control properties comprise a fluid loss of about 1 ml./30 min. or less using the standard dynamic filtration fluid loss test.

462. (Previously presented) The water-based drilling fluid of claim 448 wherein said effective fluid loss control properties comprise a fluid loss of about 1 ml./30 min. or less using the standard dynamic filtration fluid loss test.

463.-464. (Canceled).

465. (Previously presented) The water based drilling fluid of claim 441 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

466. (Previously presented) The water based drilling fluid of claim 465 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

467. (Previously presented) The water based drilling fluid of claim 446 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

468. (Previously presented) The water based drilling fluid of claim 467 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

469. (Previously presented) The water-based drilling fluid of claim 441 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of modified polysaccharides having a weight average molecular weight of about 500,000 to about 2,500,000.

470. (Previously presented) The water-based drilling fluid of any of claims 441 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of modified polysaccharides having a weight average molecular weight of about from about 700,000 to about 1,200,000.

471.-472. (Canceled).

473. (Previously presented) The water-based drilling fluid of claim 441 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of modified polysaccharides having a weight average molecular weight of about 600,000 to about 1,000,000.

474. (Previously presented) The water-based drilling fluid of claim 441 wherein said synthetically modified starches comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

475. (Previously presented) The water-based drilling fluid of claim 469 wherein said synthetically modified polysaccharides comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

476. (Currently amended) A water-based drilling fluid comprising:

an aqueous base comprising a concentration of about 20 vol.% or less non-toxic water emulsifiable material as an internal phase;

about 2 lb./bbl. or more water soluble polymer comprising one or more polymers selected from the group consisting of synthetically modified starches having a weight average molecular weight of from about 200,000 to about 2,500,000, said water soluble polymers comprising xanthan polysaccharides; and,

about 0.2 lb./bbl. or more surfactant in association with said water soluble polymer, said surfactant being selected from the group consisting of alkyl sulfates, alkyl ether sulfates, alkyl sulfonates, ethoxylated esters, ethoxylated glycoside esters, alcohol ethers, and phosphated esters comprising about 8 to about 18 carbon atoms, alkali metal salts thereof, and combinations thereof;

wherein said water soluble polymer, said surfactant, and said association provide said water- based drilling fluid with effective rheology and fluid loss control properties.

477. (Canceled)

478. (Previously presented) The water-based drilling fluid of claim 476 wherein said surfactant is selected from the group consisting of alkyl sulfates and alkyl ether sulfates.

479. (Previously presented) The water-based drilling fluid of claim 476 wherein said surfactant comprises an alkyl ether sulfate.

480. (Previously presented) The water-based drilling fluid of claim 476 wherein said surfactant is sodium tridecyl ether sulfate.

481. (Previously presented) The water-based drilling fluid of claim 476 wherein said effective rheology and fluid loss control properties comprise a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

482. (Previously presented) The water-based drilling fluid of claim 476 wherein said concentration is from about 2 to about 20 vol.%.

483. (Previously presented) The water-based drilling fluid of claim 479 wherein said concentration is from about 2 to about 20 vol.%.

484. (Previously presented) The water-based drilling fluid of claim 476 wherein said fluid consists essentially of additives other a solid bridging agent.

485. (Previously presented) The water-based drilling fluid of claim 479 wherein said fluid consists essentially of additives other than a solid bridging agent.

486. (Previously presented) The water-based drilling fluid of claim 480 wherein said fluid consists essentially of additives other than a solid bridging agent.

487. (Previously presented) The water-based drilling fluid of claim 476 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

488. (Previously presented) The water-based drilling fluid of claim 486 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

489.-491. (Canceled).

492. (Previously presented) The water based drilling fluid of claim 476 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

493. (Previously presented) The water based drilling fluid of claim 492 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

494. (Previously presented) The water based drilling fluid of claim 486 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

495. (Previously presented) The water based drilling fluid of claim 494 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

496. (Currently amended) The water based drilling fluid of claim ~~491~~481 wherein said surfactant produces a reduced surface tension of said water based drilling fluid.

497. (Previously presented) The water based drilling fluid of claim 496 wherein said reduced surface tension of said water based drilling fluid is from about 25 to about 40 nN/m.

498. (Previously presented) The water-based drilling fluid of claim 476 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of modified polysaccharides having a weight average molecular weight of about 500,000 to about 2,500,000.

499. (Previously presented) The water-based drilling fluid of claim 476 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of

modified polysaccharides having a weight average molecular weight of from about 700,000 to about 1,200,000.

500.-502. (Canceled).

503. (Previously presented) The water-based drilling fluid of claim 476 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of synthetically modified starches having a weight average molecular weight of from about 600,000 to about 1,000,000.

504. (Previously presented) The water-based drilling fluid of claim 476 wherein said synthetically modified starches comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

505. (Previously presented) The water-based drilling fluid of claim 498 wherein said synthetically modified polysaccharides comprise a functional group selected from the group consisting of a carboxymethyl group, a propylene glycol group, and an epichlorohydrin group.

506. (Previously presented) The water-based drilling fluid of claim 476 wherein said water soluble polymer comprises about 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch.

507. (Previously presented) The water-based drilling fluid of claim 486 wherein said water soluble polymer comprises about 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch.

508.-602. (Canceled).

603. (Previously presented) A water-based drilling fluid comprising:

an aqueous base comprising a concentration of non-toxic water emulsifiable material as an internal phase;

a blend of water soluble polymers comprising from about 10 wt.% to about 90 wt.% modified polysaccharide and from about 10 wt.% to about 90 wt.% synthetically modified starch; and,

an amount of surfactant in association with said water soluble polymer, said surfactant being selected from the group consisting of alkyl sulfates, alkyl ether sulfates, alkyl sulfonates, ethoxylated esters, ethoxylated glycoside esters, alcohol ethers, and phosphated esters comprising about 8 to about 18 carbon atoms, alkali metal salts thereof, and combinations thereof;

wherein said quantity, said amount, and said association provide said water based drilling fluid with effective rheology and fluid loss control properties comprising a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

604. (Previously presented) The water-based drilling fluid of claim 603 wherein said effective rheology and fluid loss control properties comprise a low shear rate viscosity of about 100,000 cP or more upon exposure to 0.3 rpm , measured with a Brookfield viscometer at 75 °F.

605. (Previously presented) The water-based drilling fluid of claim 603 wherein said surfactant is selected from the group consisting of alkyl sulfates and alkyl ether sulfates.

606. (Previously presented) The water-based drilling fluid of claim 603 wherein said surfactant comprises an alkyl ether sulfate.

607. (Previously presented) The water-based drilling fluid of claim 603 wherein said fluid consists essentially of additives other than a solid bridging agent.

608. (Previously presented) The water-based drilling fluid of claim 603 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

609. (Previously presented) The water-based drilling fluid of claim 603 wherein said effective fluid loss control properties comprise a fluid loss of about 1 ml./30 min. or less using the standard dynamic filtration fluid loss test.

610. (Previously presented) The water-based drilling fluid of claim 603 wherein said water modified polysaccharides have a weight average molecular weight of about 500,000 to about 2,500,000.

611. (Previously presented) The water-based drilling fluid of claim 603 wherein said water soluble polymer comprises one or more polymers selected from the group consisting of modified polysaccharides having a weight average molecular weight of about from about 700,000 to about 1,200,000.

612. (Previously presented) The water-based drilling fluid of claim 603 having a density of about 7.9 lb/gal. or more.

613. (Previously presented) A water-based drilling fluid comprising:

an aqueous base comprising a concentration of about 20 vol.% or less non-toxic water emulsifiable material as an internal phase;

a blend of water soluble polymers comprising from about 10 wt.% to about 90 wt.% modified polysaccharide and from about 10 wt.% to about 90 wt.% synthetically modified starch; and,

an amount of surfactant in association with said water soluble polymer, said surfactant being selected from the group consisting of alkyl sulfates, alkyl ether sulfates,

alkyl sulfonates, ethoxylated esters, ethoxylated glycoside esters, alcohol ethers, and phosphated esters comprising about 8 to about 18 carbon atoms, alkali metal salts thereof, and combinations thereof;

wherein said quantity, said amount, and said association provide said water based drilling fluid with effective rheology and fluid loss control properties comprising a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

614. (Previously presented) The water-based drilling fluid of claim 613 wherein said surfactant is selected from the group consisting of alkyl sulfates and alkyl ether sulfates.

615. (Previously presented) The water-based drilling fluid of claim 613 wherein said fluid consists essentially of additives other than a solid bridging agent.

616. (Previously presented) The water-based drilling fluid of claim 613 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

617. (Previously presented) The water-based drilling fluid of claim 613 wherein said surfactant is effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 30 microns or less.

618. (Previously presented)) The water-based drilling fluid of claim 613 wherein said surfactant is effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 20 microns or less.

619. (Previously presented) The water-based drilling fluid of claim 613 having a density of about 7.9 lb/gal. or more.

620. (Currently amended) A water-based drilling fluid comprising:

an aqueous base comprising a concentration of about 20 vol.% or less non-toxic water emulsifiable material as an internal phase;

a blend of water soluble polymers comprising synthetically modified starch and from about 40 wt.% to about 60 wt.% modified polysaccharide; and,

an amount of surfactant selected from the group consisting of alkyl sulfates and alkyl ether sulfates in association with said water soluble polymer;

wherein said quantity, said amount, and said association provide said water based drilling fluid with effective rheology and fluid loss control properties comprising a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

621. (Canceled).

622. (Previously presented) The water-based drilling fluid of claim 620 wherein said fluid consists essentially of additives other than a solid bridging agent.

623. (Previously presented) The water-based drilling fluid of claim 620 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml/30 min. or less using the standard dynamic filtration fluid loss test.

624. (Previously presented) The water-based drilling fluid of claim 620 wherein said concentration is from about 2 to about 20 vol.%.

625. (Previously presented) The water-based drilling fluid of claim 620 wherein said surfactant is effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 30 microns or less.

626. (Previously presented)) The water-based drilling fluid of claim 620 wherein said surfactant is effective to emulsify said water emulsifiable material and to produce emulsion droplets having an average diameter of about 20 microns or less.

627. (Previously presented) The water-based drilling fluid of claim 620 having a density of about 7.9 lb/gal. or more.

628. (currently amended) A water-based drilling fluid comprising:

an aqueous base comprising a concentration of about 20 vol.% or less non-toxic water emulsifiable material as an internal phase;

about 2 lb./bbl. or more water soluble polymer comprising about 50/50 wt.% modified xanthan polysaccharide and synthetically modified starch; and,

about 0.2 lb./bbl. or more surfactant selected from the group consisting of alkyl sulfates and alkyl ether sulfates in association with said water soluble polymer;

wherein said water soluble polymer, said surfactant, and said association provide said water- based drilling fluid with effective rheology and fluid loss control properties.

629. (Canceled) .

630. (Previously presented) The water-based drilling fluid of claim 628 wherein said effective rheology and fluid loss control properties comprise a low shear rate viscosity of about 70,000 cP or more upon exposure to 0.3 rpm, measured with a Brookfield viscometer at 75 °F.

631. (Previously presented) The water-based drilling fluid of claim 628 wherein said concentration is from about 2 to about 20 vol.%.

632. (Previously presented) The water-based drilling fluid of claim 628 wherein said fluid consists essentially of additives other a solid bridging agent.

633. (Previously presented) The water-based drilling fluid of claim 628 wherein said effective fluid loss control properties comprise a fluid loss of about 5 ml./30 min. or less using the standard dynamic filtration fluid loss test.

634. (Previously presented) The water-based drilling fluid of claim 628 wherein the quantity of water-soluble polymer is from about 2 lb/bbl to about 7.5 lb/bbl.

635.-671 (Canceled)